



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/774,029

02/06/2004

Andrew R. Ferlitsch

SLA1437

7724

50735

7590

01/23/2008

MADSON & AUSTIN

15 WEST SOUTH TEMPLE

SUITE 900

SALT LAKE CITY, UT 84101

EXAMINER

MOHR, ERIC JOHN

ART UNIT

PAPER NUMBER

4181

MAIL DATE

DELIVERY MODE

01/23/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/774,029	Applicant(s) FERLITSCH, ANDREW R.	
	Examiner ERIC J. MOHR	Art Unit 4181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10 May 2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 9-14, 16, 18-21, and 26-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Rumph et al (US 6,429,948).

Consider claim 1, Rumph discloses a method for compressing image data being sent to an imaging device (**see column 2, lines 38-47**), the method comprising: obtaining capabilities of an imaging device (**see column 9, line 59 to column 10, line 11 which describe obtaining parameters of different printing systems, and using metabit information to describe these parameters**); decompressing image data upstream from a rasterization process of the imaging device (**see column 7, lines 33-42 which describe decomposing PDL compressed image files**); dividing the image data into one or more regions based on image data content (**see column 1, lines 20-37 which describe the types of data an image is divided into**); selecting a compression algorithm for each region based on content of each region (**see column 10, lines 45-48 which describe selecting different processing depending on object type**) and on the capabilities of the imaging device (**column 9, lines 39-43 describing also using the metabit information to select the processing**); compressing the image data per region using one or more selected compression algorithms (**see column 19, lines 44-**

54 which describe compression using a selected algorithm including JPEG); and assembling the compressed regions into a mixed raster format (see column 7, lines 4-7 describe the final output as raster data usable by the image output terminal).

Claims 12 and 21 are rejected as being essentially the same as claim 1, as Rumph also discloses the use of this method in computing devices and as instruction on a computer readable medium **(see column 7, lines 4-23).**

Consider claims 2 and 13, Rumph discloses the method and system of claims 1 and 12, wherein data in each region shares a common characteristic such that when the data is compressed by a lossy algorithm all the data in the region shares the same output quality **(see column 19, lines 44-54 which describe compression methods being associated with object type, these compression methods include JPEG other lossy techniques; inherently, when a region is comprised of substantially similar data, and compressed using the same compression algorithm, the output quality will be the same).**

Consider claims 3 and 14, Rumph discloses that the image data is divided into one or more regions based on text, line art and graphics **(see column 1, lines 20-28 which describe selecting objects based on different document areas).**

Consider claim 4, Rumph discloses that the image data is divided into one or more regions further based on luminous planes, color planes, backgrounds and foregrounds **(see column 20, lines 5-28 which describe the segmented object color space transforms, and column 32, line 65 to column 33, line 3 which describe object foreground and background segmentation).**

Consider claims 9, 18, and 26, Rumph discloses storing a plurality of region types and associating a plurality of candidate compression algorithms with each region type **(see column 19, lines 44-54 which describe compression methods being associated with object type)**.

Consider claims 10, 19, and 27, Rumph discloses using compression rankings in selecting a compression algorithm for each region **(see column 2, lines 43-44 which describe using optimal compression for each object)**.

Consider claims 11, 20, and 28, Rumph discloses sending the mixed raster format of the image data downstream to a rasterization process of the imaging device **(see column 2, lines 63-67 which describe sending a page for later editing, transmission, and printing in a printer control device)**.

Consider claim 16, Rumph discloses that the capabilities of the imaging device are obtained by querying a process that is not part of the imaging device **(see column 9, line 59 to column 10, line 11 which describe obtaining parameters of different printing systems, and using metabit information to describe these parameters)**.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5-8, 15, 17, and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rumph as applied to claims 1, 12, and 21 above, and further in view of Chang et al (US 2002/0099884).

Consider claims 5-7, 15, and 22-24, Rumph discloses that the capabilities of the imaging device are obtained **(see column 9, line 59 to column 10, line 11 which describe obtaining parameters of different printing systems, and using metabit information to describe these parameters)**. Rumph does not explicitly disclose that the capabilities of the imaging device are obtained directly from the imaging device, by querying an imaging service, or by querying an imaging device database. Chang discloses output device parameters in a profile which can be obtained from the output device, from an output controller, or from an information apparatus **(paragraph 0230)**.

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Rumph, and modify the method used to obtain imaging device capabilities to include multiple sources of data, as taught by Chang, thus allowing data to be processed to a specific device's input requirement, as discussed by Chang **(paragraph 0008)**.

Consider claims 8, 17, and 25, Rumph discloses that the capabilities of the imaging device are obtained **(see column 9, line 59 to column 10, line 11 which describe obtaining parameters of different printing systems, and using metabit information to describe these parameters)**. Rumph does not explicitly disclose that the capabilities comprise supported image file formats, supported compression

Art Unit: 4181

methods, supported image rendering and enhancement methods, and supported color spaces and gamuts. Chang discloses the capabilities to include file format, encoding, language, instructions, and protocols (**paragraph 0008**). Chang also discloses modifying color parameters (**paragraph 0015-0016**) in an acceptable form for the output device (**paragraph 0017**).

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Rumph, and modify the method used to obtain imaging device capabilities to devices with specific parameters, as taught by Chang, thus allowing data to be processed to a specific device's input requirement, as discussed by Chang (**paragraph 0008**).

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIC J. MOHR whose telephone number is (571)270-5140. The examiner can normally be reached on 7:30am-5pm M-Th, 7:30am-4pm Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 4181

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Eric J Mohr/
Examiner, Art Unit 4181

/Nick Corsaro/
Supervisory Patent Examiner, Art Unit 4181